



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/574,341	05/20/2000	NICHOLAS A. LANGRIND	102689-6	8716
21125	7590	11/12/2004	EXAMINER	
NUTTER MCCLENNEN & FISH LLP WORLD TRADE CENTER WEST 155 SEAPORT BOULEVARD BOSTON, MA 02210-2604			PATEL, NITIN C	
			ART UNIT	PAPER NUMBER
			2116	

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/574,341	LANGRIND ET AL.	
	Examiner	Art Unit	
	Nitin C. Patel	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on amendment filed on September 17, 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-29 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-29 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 13 November 2000 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date .

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: ____ .

DETAILED ACTION

1. This is in responsive to amendment filed on September 17, 2004.
2. Claim 29 has been added new.
3. Claims 1 – 29 are pending with the application.
4. Applicant is requested to specifically point out in the specifications the newly added element “network device” of claims 1, 6, 23, and 29.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 – 29 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Rao, US Patent 6,789,118 B1.
7. As to claim 1, Rao discloses a method of establishing a path for data transmissions in a network device [multi-service network switch] having a plurality of possible paths [multi-service network switch with policy based routing] comprising:

- a. defining a configuration policy designating internal connection paths within the device [col. 19, lines 20 – 67, col. 20, lines 1 – 59, col. 23, lines 28 – 65, col. 24, lines 1 – 30, col. 26, lines 66 – 67, col. 27, lines 1 – 21, col. 11, lines 21 - 48], and
- b. establishing one or more [multiple] internal connection paths [virtual routes] through the device [virtual routers] based upon the configuration policy [col. 13, lines 65 – 67,

col. 14, lines 1 – 67, col. 15, lines 46 – 65, col. 2, lines 11 – 29, col. 3, lines 53 – 67, col. 4, lines 1 – 15, fig. 1].

8. As to claim 6, Rao discloses a method of establishing a path for data transmissions in a network device [multi-service network switch] having a plurality of possible paths [routes] through a cross-connection card [FM, forwarding modules] comprising:

a. establishing internal connection paths [routing] through the cross-connection card [FM] based upon a configuration policy [policy based routing][col. 2, lines 11 – 17, col. 13, lines 65 – 67, col. 14, lines 1 – 67, col. 15, lines 46 – 65, col. 2, lines 11 – 29, col. 3, lines 53 – 67, col. 4, lines 1 – 15, fig. 1].

9. As to claim 23, Rao discloses computer network device [multi-service network switch], comprising:

a. a cross-connection card [FM] comprising a plurality of programmable paths [application specific daughter cards] internal to said device [col. 4, lines 6 – 15, col. 6, lines 3 – 11];

b. a configuration policy file stored [in policy database] within the computer device [col. 8, lines 64 – 67, col. 9, lines 1 – 10, and lines 53 - 64]; and

c. a policy provisioning manager [resource manager] for programming the plurality of programmable paths using the configuration policy file [col. 8, lines 58 – 67, col. 9, lines 1 – 10, col. 23, lines 28 – 67, col. 24, lines 1 – 6, col. 19, lines 20 – 67, col. 20, lines 1 – 59].

10. As to claim 29, Rao discloses a network device [multi-service network switch] comprising at least one port for receiving data [input port] from an external device and a plurality of forwarding systems [FM forwarding modules] for processing the received data, a method of

establishing a path [route] between said port and at least one of said forwarding systems, comprising:

a. defining a configuration policy for designating at least one port to at least one of said forwarding systems [col. 19, lines 20 – 67, col. 20, lines 1 – 59, col. 23, lines 28 – 65, col. 24, lines 1 – 30, col. 26, lines 66 – 67, col. 27, lines 1 – 21, col. 11, lines 21 - 48], and

b. utilizing said configuration policy [by retrieving call policy database] to establish an internal connection path [policy based routing] between said port and at least one of said forwarding systems [col. 8, lines 58 – 67, col. 9, lines 1 – 10, col. 13, lines 65 – 67, col. 14, lines 1 – 67, col. 15, lines 46 – 65, col. 2, lines 11 – 29, col. 3, lines 53 – 67, col. 4, lines 1 – 15, fig. 1, fig. 12].

11. As to claims 2, 3, 18, 19, and 28, Rao discloses to store the configuration file [as Rao discloses search of policy database for a call policy, which inherently teaches to store] within a configuration database [policy data base] within the network device [multi-service network switch] [col. 8, lines 58 – 67, col. 9, lines 1 – 10, and lines 53 – 60, col. 10, lines 18 - 28].

12. As to claims 4, and 20, Rao teaches the configuration policy dynamically changed [dynamic configuration] within the system while the network device [multi-service switch] continues to operate [col. 10, lines 43 – 52, col. 23, lines 28 – 67, col. 24, lines 1 – 6].

13. As to claims 5, and 21, Rao discloses changing established internal connection path through the network device based upon a configuration policy [col. 8, lines 58 – 67, col. 9, lines 1 – 64, col. 19, lines 20 – 67, col. 20, line 1 – 59] and changing resource needs [col. 16, lines 24 – 53, col. 18, lines 5 – 65, fig. 16].

14. As to claim 7, Rao discloses applying the configuration policy based on available resources and needs at a given time [col. 16, lines 29 – 53].
15. As to claims 8 - 10, Rao discloses creating a table in configuration database to provide connection information to the device [col. 19, lines 20 – 30, 39 – 67, col. 20, lines 1 – 59].
16. As to claim 11, Rao teaches establishing a partial record in a service end point table when user connects to a particular port on a universal port card in system [col. 23, lines 28 – 67, col. 24, lines 1 – 57].
17. As to claims 12, and 26, Rao teaches sending a notification based on partial record [whenever a port's state changes] to a policy provisioning manager [col. 24, lines 35 – 67].
18. As to claim 13, Rao discloses a connection policy based on a comparison of at least one new path characteristic with available resources on a forwarding card [col. 18, lines 5 – 62, col. 20, 1 – 18, col. 19, lines 39 – 62, col. 20, lines 34 - 59].
19. As to claims 14 – 15, Rao discloses a multi-service network switch with allocation of slot number, port number and ability to partition the switch into multiple virtual routers [VRs] and virtual private networks [VPNs] and resource management with efficient provisioning of VRs therefore he teaches necessary step of comparison too [col. 12, lines 55 – 65, col. 19, lines 20 – 67, col. 20, lines 1 – 60].
20. As to claim 16, Rao discloses a multi-service network switch with a system control module [SCM], function module [FM] with flash prom, which inherently ensures maintaining of configuration settings in the event of a system shut down [col. 5, lines 48 – 53, fig. 2].
21. As to claims 17, 22, and 24, Rao discloses a network device [multi-service switch] comprises a router [col. 19, lines 20 – 25].

22. As to claim 25, Rao discloses a plurality of forwarding cards [FM] including plurality of ports coupled to the cross-connection card, and plurality of physical cards including a plurality of ports coupled to the cross-connection card, wherein the plurality of programmable paths connect ports of forwarding cards [FM] with particular ports of physical cards [col. 3, lines 53 – 61, col. 4, lines 6 – 15, col. 6, lines 9 – 11, fig. 1, 18].

23. As to claim 27, Rao discloses multi-service network switch with policy based routing with implementing a connection policy to establish the path for data transmission, modifying the connection policy, and using modified connection policy to establish the path for data transmission [abstract, col. 2, lines 11 – 29].

24. Prior Art not relied upon:

Please refer to the references listed in attached PTO-892, which, are not relied upon for claim rejection since these references are relevant to the claimed invention.

25. Applicant's arguments with respect to claims 1 - 29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 2116

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin C. Patel whose telephone number is 571-272-3675. The examiner can normally be reached on 7:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on 571-272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nitin C. Patel
November 8, 2004



REHANA PERVEEN
PRIMARY EXAMINER